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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------|---------------------|------------------|
| 10/089,773      | 04/02/2002  | John William Richardson | RCA 90195           | 2617             |

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EXAMINER

TAYLOR, BARRY W

ART UNIT PAPER NUMBER

2643

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                   |  |
|------------------------------|-------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/089,773 | Applicant(s)<br>RICHARDSON ET AL. |  |
|                              | Examiner<br>Barry W. Taylor   | Art Unit<br>2643                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 21,23,24,26 and 28-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21,23,24,26 and 28-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. New Claims 31-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner is unable to find support in Applicants specification wherein POTS digitizer integrated into said DSLAM? Furthermore, the DSL environment (i.e. Applicants figure 21) clearly shows the POTS digitizer (item 2105) is separated (i.e. not coupled) from DSLAM?

Applicants point to page 10, lines 3-7 of specification for support (see paper dated 11/15/05, page 5). The Examiner notes that page 10, lines 3-7 recite a Cisco 7200 series High Performance Router. Furthermore, the Examiner notes that is not novel to rename old components and claim as new.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 21, 23-24 and 26, 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan et al (6,141,339 hereinafter Kaplan) in view of Gerszberg et al (6,359,881 hereinafter Gerszberg) and Gupta et al (6,731,627 hereinafter Gupta) further in view of Bellenger et al (6,320,867 hereinafter Bellenger).

Regarding claims 21 and 29. Kaplan teaches a system and method for providing a telephone service in a digital subscriber loop environment (see loop environment figure 2), comprising:

a signal digitizer capable (see 206 figure 2 to provide voice or data over ATM using modem 208 figure 2) of receiving traffic from one or more signal splitters, said signal digitizer converting an analog signal into a digital signal in a format in the event of a failure at the customer site, said first format being an ATM-compatible format (see

figure 2 wherein interface 204 receives analog signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2); and

said digitizer coupling the digital signal in the first format to an ATM switch connected to a telco switch (see 206 figure 2 to provide voice or data over ATM using modem 208 figure 2).

Kaplan does not show failure at customer site considered.

Gerszberg teaches loop network service architecture wherein a lifeline is provided for continuous telephony service in the event of a power failure at the CPE (see 126 figure 2). The lifeline is utilized to connect interface device to the local telephone company's central office (col. 7 lines 19-60). Gerszberg teaches converting analog to digital so that customers can still have service over ATM-type connection (col. 10 lines 10-22).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teaching of Gerszberg into the teachings of Kaplan in order to provide backup ATM-type service when failure at customer premises is occurring.

According to Applicants newly amended claims and argument on page 5 and 6 of paper dated 6/6/05 Kaplan in view of Gerszberg fail to teach signal digitizer coupled between the POTS splitter and ATM switch in the DSL environment (i.e. not at residence). However, Kaplan teaches the digitizer connected between one or more signal splitters and the ATM switch (see figure 2 wherein interface 204 receives analog

signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2).

Gupta cites Kaplan and improves on prior art by using a signal digitizer (see item 32 figure 1) that is external to CPE (see item 12 figure 1) and coupled between CPE (item 12 figure 1) and an ATM switch (item 38 figure 1) which is then connected to telco switch (see item 52 figure 1) thereby providing for lowering cost and reducing service turn-up times while still leveraging the PSTN switching and control engines for providing value added services at low-risk (col. 1 lines 49-67).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teaching of Gupta into the teachings of Kaplan in view of Gerszberg in order to allow service providers the ability to provide low-cost and low-risk service updates at faster turn-up times as disclosed by Gupta (col. 1 lines 49-67).

Next, Applicants contend that none of the above mention references use the term "statistical multiplexer" (see newly amended claim language and comment on page 6, lines 11-12, paper dated 11/15/05).

Bellenger teaches method and apparatus for management of subscriber link traffic on digital networks (title, abstract) that relieves congestion associated with interfacing multiple types of analog subscriber lines by using statistical multiplexing which reallocates existing network and backplane data bandwidth during idle portions of a voice-band or broad-band data session (columns 1-6). Bellenger discloses that by using statistical multiplexing allows service providers the ability to manage traffic more

efficiently without having to dedicate modems to each subscriber line (col. 6 lines 39-44, col. 7 lines 44-58).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of the invention to utilize statistical multiplexing as taught by Bellenger into the teachings of Kaplan, Gerszberg and Gupta in order reduce network congestion while saving service provider money by not having to dedicate a modem to each subscriber.

Regarding claim 23. Gerszberg further teaches the analog signal is coupled to digitizer via telephone wires (see figure 4A wherein when failure occurs at customer premises the customer still receives service by the analog lines (see 30 figure 4A) being connected via telephone wires (see wires entering line cards 196 figure 4A before they are sent back to network)).

Regarding claim 24. Gerszberg teaches power failure at customer site (col. 10 lines 10-22).

Regarding claim 26. Kaplan teaches a system and method for providing a telephone service in a digital subscriber loop environment (see loop environment figure 2), comprising:

receiving an analog signal (see 206 figure 2 to provide voice or data over ATM using modem 208 figure 2) of receiving traffic from one or more signal splitters, said signal digitizer converting an analog signal into a digital signal in a format in the event of a failure at the customer site, said first format being an ATM-compatible format (see figure 2 wherein interface 204 receives analog signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2);

Kaplan does not show failure at customer site considered.

Gerszberg teaches loop network service architecture wherein a lifeline is provided for continuous telephony service in the event of a power failure at the CPE (see 126 figure 2). The lifeline is utilized to connect interface device to the local telephone company's central office (col. 7 lines 19-60). Gerszberg teaches converting analog to digital so that customers can still have service over ATM-type connection (col. 10 lines 10-22). The Examiner notes that Gerszberg (col. 10 lines 10-22) firsts converts the analog signal into digital before transmitting over ATM-type network.

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teaching of Gerszberg into the teachings of Kaplan in order to provide backup ATM-type service when failure at customer premises is occurring.

According to Applicants newly amended claims and argument on page 5 and 6 of paper dated 6/6/05 Kaplan in view of Gerszberg fail to teach signal digitizer coupled between the POTS splitter and ATM switch in the DSL environment (i.e. not at residence). However, Kaplan teaches the digitizer connected between one or more signal splitters and the ATM switch (see figure 2 wherein interface 204 receives analog signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2).

Gupta cites Kaplan and improves on prior art by using a signal digitizer (see item 32 figure 1) that is external to CPE (see item 12 figure 1) and coupled between CPE (item 12 figure 1) and an ATM switch (item 38 figure 1) which is then connected to telco



switch (see item 52 figure 1) thereby providing for lowering cost and reducing service turn-up times while still leveraging the PSTN switching and control engines for providing value added services at low-risk (col. 1 lines 49-67).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teaching of Gupta into the teachings of Kaplan in view of Gerszberg in order to allow service providers the ability to provide low-cost and low-risk service updates at faster turn-up times as disclosed by Gupta (col. 1 lines 49-67).

Next, Applicants contend that none of the above mention references use the term "statistical multiplexer" (see newly amended claim language and comment on page 6, lines 11-12, paper dated 11/15/05).

Bellenger teaches method and apparatus for management of subscriber link traffic on digital networks (title, abstract) that relieves congestion associated with interfacing multiple types of analog subscriber lines by using statistical multiplexing which reallocates existing network and backplane data bandwidth during idle portions of a voice-band or broad-band data session (columns 1-6). Bellenger discloses that by using statistical multiplexing allows service providers the ability to manage traffic more efficiently without having to dedicate modems to each subscriber line (col. 6 lines 39-44, col. 7 lines 44-58).

Therefore, it would have been obvious for any one of ordinary skill in the art at the time of the invention to utilize statistical multiplexing as taught by Bellenger into the

teachings of Kaplan, Gerszberg and Gupta in order reduce network congestion while saving service provider money by not having to dedicate a modem to each subscriber.

Regarding claim 28. Gerszberg teaches power failure at customer site (col. 10 lines 10-22).

Regarding claim 30. Kaplan teaches the digitizer connected between one or more signal splitters and the ATM switch (see figure 2 wherein interface 204 receives analog signals from telephony 210 and 212, next the analog signal is converted into ATM 206 figure 2).

Regarding claims 31-33. The following rejection is being made for what is best understood by the Examiner due to the 112 first rejection listed above. Gupta not only shows CPE (item 12 figure 1) having an external signal digitizer (item 32 figure 1) coupled between the CPE and an ATM switch (38 figure 1) but discloses the POTS digitizer being integrated into DSLAM (see item 34 figure 1 wherein digitizer 32 has DSLAM 34 used to receive voice and data from CPE, the digitizer 32 also has an ATM interface so that voice and data signals received from CPE may traverse the ATM network 38). Gupta discloses that the DSLAM and ATM interface can be conventional networking equipment such as Cisco Systems equipment numbers 6100/6200 and 6400 respectively.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 21, 26 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2643

### ***Conclusion***

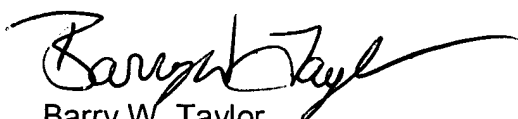
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Friday, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (571) 272-7499. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Centralized Delivery Policy:** For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the central fax number **(571-273-8300)**.



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